

## **UTAH DEPARTMENT OF TRANSPORTATION**

## PROCEDURE FOR FEDERAL-AID FUNDING OF LOCAL GOVERNMENT PROJECTS

Non-Urban

Small Urban Area

Bridge Replacement

**Urbanized Area** 

Congestion Mitigation / Air Quality, and

**Enhancement** 

**Program Development** 

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# UTAH DEPARTMENT OF TRANSPORTATION PROCEDURE FOR FEDERAL-AID FUNDING OF LOCAL-GOVERNMENT NON-URBAN, SMALL URBAN AREA, BRIDGE REPLACEMENT, URBANIZED AREA, CONGESTION MITIGATION / AIR QUALITY, AND ENHANCEMENT PROJECTS

#### 1.0 AUTHORITY

Authority: Utah Code Annotated, 1953 as amended, Title 63, Chapter 49. Utah Code Annotated, 1953 as amended, Title 26, Chapter 120 through 122. 23 U.S.C. 109, 315, 402, and 23 CFR 625. 49 CFR 1.48(b).

#### 1.1 PURPOSE

To designate those policies, procedures, standards, specifications, and guides which are acceptable to the Utah Department of Transportation (UDOT) in the administration of funds for local-government Federal-aid projects provided for in the Surface Transportation Program (STP) of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21).

These include non-urban, small urban area, urbanized area, congestion mitigation/air quality, enhancement, and bridge replacement projects.

This Plan does not apply when STP funds are used for National Highway System (NHS) new construction or reconstruction projects which exceed \$1,000,000.

#### 1.2 **DEFINITIONS**

- A. Bridge Program The Highway Bridge Replacement and Rehabilitation Program
- B. Local Engineer of Record A consultant engineer selected by a local authority using an approved selection criteria, to provide engineering services
- C. Non-urban All areas of the state located outside urban or urbanized areas officially designated by UDOT
- D. Small Urban Area An urban area having a population between 5,000 and 50,000 as designated by UDOT
- E. Urbanized Area An urbanized area having a population over 50,000 as designated by UDOT

## 1.3 ABBREVIATIONS

A.	CMAQ	Congestion Mitigation / Air Quality
B.	СМРО	Cache Metropolitan Planning Organization
C.	FAPG	Federal-Aid Policy Guide
D.	FHWA	Federal Highway Administration
E.	I/M	Inspection/Maintenance
F.	ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
G.	JHC	Joint Highway Committee
H.	LGPE	Local Government Projects Engineer for UDOT
l.	MAG	Mountainland Association of Governments
J.	MPO	Metropolitan Planning Organization
K.	NHS	National Highway System
L.	RSMS	Road Surface Management System
M.	SIP	Statewide Implementation Plan
N.	SPE	Statewide Planning Engineer for UDOT
Ο.	STP	Surface Transportation Program of ISTEA
P.	STIP	Statewide Transportation Improvement Program
Q.	TIP	Transportation Improvement Program
R.	TEA-21	Transportation Equity Act for the 21st Century
S.	UDOT	Utah Department of Transportation
T.	UTC	Utah Transportation Commission
U.	WFRC	Wasatch Front Regional Council

#### 1.4 GOALS

The goals of UDOT, with respect to STP funds, are to:

- A. Implement and maintain a long range transportation planning process, through which needs are identified and prioritized in urbanized, non-urban, and small urban areas.
- B. Implement management systems as required in Section 1034 of the ISTEA to aid UDOT and local agencies in selecting projects for design and construction.
- C. Encourage local agencies to pursue the development of eligible projects.
- D. Encourage larger projects that would use funds more efficiently.
- E. Encourage timely use of funds.
- F. Acquaint local officials with Federal and State transportation programs, law, and requirements through annual meetings held in each county by the LGPE.

#### 1.5 APPLICATION

The LGPE, within the Local Government Liaison Section of the Program Development Group of UDOT, is responsible for working with local government agencies to plan and to program projects onto the Statewide Transportation Improvement Program (STIP). These agencies include the Joint Highway Committee (JHC), the Wasatch Front Regional Council (WFRC), Mountainland Association of Governments (MAG), and Cache Metropolitan Planning Organization (CMPO).

The Regions within UDOT are responsible for oversight of local government projects programmed on the STIP. This includes agreements, contracts, design, right-of-way appraisal and acquisition, construction, delinquent accounts, and making provisions for final certification of work. Every project on the STIP is assigned a Project Manager, through the Region, who will monitor the project from the STIP to one year into maintenance.

The Regions provide information and guidance to local agencies and their engineers on various phases of project development, and assure compliance with all federal and state requirements.

The JHC selects Technical Subcommittees to prioritize local-government projects for each of the two following funding categories: non-urban and small urban area.

The Non-Urban Technical Subcommittee shall consist of members of the JHC, one each from UDOT Regions 1, 2, and 3 and one each from the Cedar City, Richfield, and Price Districts in Region 4, who have eligible roads in their jurisdiction. The Small Urban Area Technical Subcommittee shall consist of members of the League of Cities and Towns, one from each area that is officially designated as small urban, and one member from UDOT.

The JHC prioritizes local-government Bridge Program projects.

The JHC also recommends policy to UDOT and the UTC and legislation to the state legislature.

The WFRC selects local-government projects in the Salt Lake and Ogden urbanized areas, in consultation with UDOT.

The MAG selects local-government projects in the Provo-Orem urbanized area, in consultation with UDOT.

The CMPO selects local-government projects in the Logan urbanized area, in consultation with UDOT.

The UDOT Enhancement Committee selects enhancement projects.

All projects must be included in the STIP and approved by the UTC. Funds will be obligated to projects as they are advertised for bid.

#### 1.6 FUNDING CATEGORIES

#### A. NON-URBAN STP ROAD FUNDS:

- Eligible roads are those located within non-urban areas and functionally classified as major collectors or higher. TEA-21 also allows 15% of the nonurban funds for use on eligible Minor-Collector roads, JHC approval would be needed for minor collector eligibility.
- 2. Both design engineering and construction engineering are eligible for Federal-aid funds.
- 3. Federal-aid Non-Urban STP Funds set aside by the State of Utah are divided as follows:

50% to local-government non-urban Federal-aid projects. 50% to state non-urban Federal-aid projects.

- 4. The JHC will recommend a program of local government non-urban projects to the UTC.
- 5. The estimate must be between \$400,000 and \$2,000,000 for the project to qualify. Federal-aid funds for each project are capped when the project is programmed on the three-year element of the STIP for the amount estimated on the Project Concept Report. Programmed funds may not exceed \$2,000,000. At the time of bid, the project will be reviewed by the UDOT Region to verify compliance with the capped amount. Costs which exceed the capped amount will be paid by the local authority, or the scope of the project will be reduced appropriately. These costs include design engineering, estimated costs for UDOT services, right-of-way, utilities,

construction, and construction engineering. After award of the contract, the eligible costs will be paid for at the project's established matching ratio.

The local authority may, in case of hardship, petition the Joint Highway Committee for Federal-aid participation in any amount exceeding the capped amount.

#### B. SMALL URBAN AREA STP FUNDS

- 1. Eligible roads are those located within small urban areas of 5,000 to 50,000 population as designated by the Bureau of Census and functionally classified as collector or higher.
- 2. Both design engineering and construction engineering are eligible for Federal-aid funds.
- 3. Total costs for the project may not exceed \$1,000,000. Federal-aid funds for each project are capped when the project is programmed. All costs which exceed the capped amount amount shall be paid for by local authority. The cap may be adjusted by the JHC.
- 4. The JHC will recommend a program of projects for small-urban areas to the UTC.

#### C. BRIDGE PROGRAM FUNDS

- 1. The JHC has determined that the available Bridge Program funds will be used only for bridge replacement and for bridge rehabilitation of bridges with a sufficiency rating of 70 or below.
- Eligible bridges for replacement are those listed on the National Bridge Inventory Selection List and which have a sufficiency rating less than 50. The bridges must also be either functionally obsolete or structurally deficient.
- 3. Both design engineering and construction engineering are eligible for Federal-aid funds.
- 4. Bridge Program funds apportioned to the State of Utah will be divided as follows:
  - Approximately 30% or \$3.15 million to counties and cities Approximately 70% to the state
- 5. The JHC will recommend a program of local government Bridge Program projects to the UTC.

#### D. URBANIZED AREA STP FUNDS

- 1. Eligible projects are those located within Urbanized Areas.
- 2. Eligible projects include:
  - ! Construction, reconstruction, resurfacing, restoration, and rehabilitation
  - ! Operational improvements
  - ! Capital costs for transit projects and publicly owned intracity or intercity bus terminals or facilities
  - ! Highway and transit safety improvements
  - ! Surface transportation planning, highway and transit technology transfer activities, and research and development
  - ! Capital and operating costs for traffic management and control
  - ! Fringe and corridor parking facilities
  - ! Carpool and vanpool projects
  - ! Most transportation control measures in the Clean Air Act
  - ! Development and establishment of Management Systems
  - ! Transportation Enhancements
  - ! Participation in wetland mitigation and wetland banking
  - ! Bicycle facilities and pedestrian walkways
  - ! State bicycle and pedestrian coordination
- 3. Design engineering and construction engineering are eligible for Federalaid only if approved by the participating MPO.

#### E. CONGESTION MITIGATION / AIR QUALITY (CMAQ) FUNDS

- 1. Air quality non-attainment areas are allocated these funds based on population of the urbanized area.
- 2. Eligible projects include:
  - ! Transportation activities in an approved Statewide Implementation Plan (SIP)
  - ! Transportation Control Measures
  - ! Bicycle and Pedestrian Facilities and Programs
  - ! Management Systems
  - ! Traffic Monitoring, Management, and Control Measures
  - ! Emission I/M Programs
  - ! Transit Projects
  - ! Planning and Air Quality Monitoring Projects
  - ! Public/Private Initiatives
- 3. Design engineering and construction engineering are eligible for Federalaid only if approved by the participating MPO.

#### F. STP ENHANCEMENT FUNDS

- 1. Eligible projects include:
  - ! Pedestrian and bicycle facilities
  - ! Acquisition of scenic and historic sites
  - ! Scenic and historic highway programs
  - ! Landscaping
  - ! Rehabilitation of historic transportation facilities
  - ! Preservation of abandoned transportation corridors
  - ! Archeological planning and research
  - ! Control and removal of outdoor advertising
  - ! Mitigation of water quality impacts from roadway runoff
- 2. Design engineering is eligible for Federal-aid funds on enhancement projects.
- 3. The project estimate on enhancement projects must be between \$50,000 and \$500,000 to qualify. Project funds are capped when the project is programmed on the three-year element of the STIP. Project costs include design, UDOT review and management, construction and construction engineering, UDOT construction monitoring, and up to three years inflation costs. No Federal funds will be programmed for overruns.
- 4. Both soft and hard local match are allowed as eligible by law and FHWA regulations.

#### 1.7 PROJECT DEVELOPMENT

Until a formal statewide long range transportation planning process is established, the following procedures shall be used for local-government Federal-aid projects:

#### A. NON-URBAN AND SMALL URBAN AREA ROAD PROJECTS

Every three years, the LGPE schedules a field review of all eligible local-government non-urban and small urban area roads by a field review team. This team consists of no more than three members, including the local government representative. The field review team prepares field documents for the Road

Surface Management System (RSMS) and enters the data on the computer program to obtain a priority list of the projects for both non-urban and small urban roads. The priority lists are refined based on field observations and submitted to the Statewide Planning Engineer (SPE). The SPE may recommend additional roads for consideration by the JHC, with regard to other management systems and in coordination with state highway needs. Input from public planning meetings is also considered at this time. The SPE submits the lists to the LGPE for review respectively by the JHC Non-urban Technical Subcommittee or the JHC Small Urban Area Technical Subcommittee. Each

technical subcommittee recommends a three-year construction element and twoyear concept development element to the JHC. The JHC reviews and recommends the elements to the UTC for inclusion in the STIP.

Local agencies with projects on the STIP are contacted by the UDOT Regions and notified of requirements and procedures. Projects which are not obligated in the year they are programmed are referred to the JHC for reprioritization.

#### B. BRIDGE REPLACEMENT

The UDOT prepares a priority list of bridge replacement projects based on sufficiency rating. Bridges are ranked from the lowest sufficiency rating to the highest. The priority list is submitted to the JHC for recommendation.

The priority list is submitted by the LGPE to the local agencies for commitment of matching funds to specific projects. The projects with committed matching funds are recommended to the UTC for inclusion on the STIP. Projects which are not obligated in the year they are programmed are referred to the JHC for reprioritization.

#### C. URBANIZED AREA PROJECTS

The MPO's receive concept reports from their member agencies. Technical committees review the reports and prepare a prioritized list of projects. The MPO's prepare TIP's for inclusion in the STIP.

#### D. CMAQ PROJECTS

MPO's have responsibility for developing projects utilizing CMAQ funds.

#### E. ENHANCEMENT PROJECTS

The UDOT Enhancement Committee receives applications from various agencies and prepares a list of projects for review and approval by the UTC for inclusion in the STIP.

#### 1.8 OVERVIEW

Projects developed and administered under this Plan follow the procedures set forth in UDOT's Manual of Policy and Procedure.

The LGPE works with the MPO's, the JHC, and the Enhancement Committee to plan and program projects for the STIP. The UDOT Regions provide design and construction project management for projects programmed on an approved STIP.

The sponsoring local agency commits to a project by executing a Cooperative Agreement for Reimbursement, prepared by the UDOT Region, which describes the location of the

project, the scope of work, an estimate of the design or construction costs, and the local agency matching funds.

The assigned UDOT Region Project Manager meets with the sponsoring local agency immediately after a project has been programmed. Work begins at this time on the independent estimate for a request for qualification, for use of an engineer of record, or for use of the UDOT local government consultant pool, should a consultant be required for design and/or construction engineering.

The UDOT Regions provide information and guidance to all local agencies and their engineers on the various phases of project development to insure compliance with all Federal and State requirements. Continuous cooperation with local agency officials is maintained throughout all phases of project development.

Contracts are awarded or rejected in accordance with UDOT's Manual of Policy and Procedure except that on local-government projects, the sponsoring local agency shall give written concurrence.

All phases of preliminary engineering, through preparation of final plans, specifications and estimates, may be accomplished by Local Engineers, Local Engineers of Record, or Consultants. A UDOT Project Manager will monitor each project. UDOT may not perform preliminary engineering unless hardship conditions exist for the local agency and the engineering is approved by UDOT. The local agency shall execute a Cooperative Agreement for Reimbursement and a Consultant Services Contract with UDOT prior to beginning any engineering.

AASHTO Standards apply to all projects developed and administered under this Plan. UDOT Standards and Manuals of Instruction may be used as needed.

#### 1.9 APPROVAL AND AUTHORIZATION

- A. The LGPE:
  - 1. Approves the Concept Report
- B. The UDOT Region:
  - 1. Authorizes Preliminary Engineering (PE)
  - 2. Approves the Design Study Report
  - 3. Authorizes development of Plans, Specifications, and Estimates (P.S.& E.), including utility and railroad agreements
  - 4. Authorizes acquisition of right of way
  - 5. Approves advertisement

- 6. Approves exceptions to design standards
- 7. Approves preliminary plans for major or unusual features as described in FAPG G6012.1
- 8. Approves experimental features. Local agency shall provide and pay for follow-up documentation.

#### B. The FHWA:

- 1. Approves environmental documents in accordance with 23 CFR 771, 772, and 777, and Technical Advisory T6640.8A, October 30, 1987.
- 2. Authorizes project funding.
- 3. Executes project agreement for reimbursement.

#### 1.10 TECHNICAL ASSISTANCE AND REVIEWS

The design engineer prepares requests for technical assistance and engineering services from UDOT and submits them to the UDOT Project Manager through the local government agency. The UDOT Project Manager submits the requests to the appropriate UDOT Region or Group for further action. Costs will be billed to the design engineer.

The Project Manager, in the Region, schedules and conducts reviews of plans to determine their suitability for advertising and to insure that applicable standards have been followed. Costs will be charged to the project.

#### 1.11 STANDARDS AND SPECIFICATIONS

#### A. APPLICATION OF DESIGN STANDARDS

All projects administered under this Plan shall be designed to meet existing and future needs, with emphasis on safety, economy, and low cost maintenance.

All projects shall comply with the provisions of 23 CFR 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise, and with Utah's Implementation Plan on Air Quality. Erosion control shall conform to the Storm Water Pollution Prevention Plan and recommendations of the UDOT Landscape Design Unit. All projects shall comply with the Americans with Disabilities Act.

Exceptions to the applicable design standards, when requested by a local agency and shown to be in the public interest, may be approved on a project by project basis by the UDOT Region.

#### B. ROADWAY DESIGN STANDARDS

Project design engineering shall follow UDOT Procedure 08-1, "Procedure for Projects" and project design shall meet or exceed the standards contained in the following publications. The current issue of each publication shall be used for design, regardless of the date given below:

- 1. A Policy on Geometric Design of Highways and Streets, AASHTO 1994.
- 2. The Manual on Uniform Traffic Control Devices (MUTCD) with Utah Supplements thereto.
- 3. The Roadside Design Guide, AASHTO 1996.
- 4. AASHTO Guide for Design of Pavement Structures, AASHTO 1993.
- 5. Erosion and Sediment Control on Highway Construction Projects, FHWA, 23 CFR 650, Subpart B.
- 6. Location and Hydraulic Design of Encroachments of Flood Plains, FHWA, 23 CFR 650, Subpart A.
- 7. Procedures for Abatement of Highway Traffic Noise and Construction Noise, FHWA, 23 CFR 772.
- 8. Accommodation of Utilities, FHWA, 23 CFR 645, Subpart B.
- 9. Pavement Design, FHWA, 23 CFR, 626.
- 10. A Guide for Erecting Mailboxes on Highways, AASHTO, 1984.

The following should be used in Project Design as needed:

- 1. Standard Specifications for Road and Bridge Construction, State of Utah, 1999.
- UDOT Manuals of Instruction

#### C. BRIDGE AND CULVERT DESIGN STANDARDS

Bridge and culvert designs shall meet or exceed the standards contained in the following:

- 1. Standard Specifications for Highway Bridges, Fifteenth Edition, AASHTO 1992, and Interim Specifications issued annually.
- 2. Standard Specifications for Movable Highway Bridges, AASHTO.
- 3. Bridge Welding Code (D1.5-88), ANSI / AASHTO / AWS.

- 4. The Roadside Design Guide, AASHTO, 1988.
- 5. 23 CFR 650, Subpart A, Subpart B.

The following should be used in bridge and culvert design as needed:

- Standard Specifications for Road and Bridge Construction, State of Utah, 1999.
- 2. UDOT Manuals of Instruction.

#### 1.12 RIGHT OF WAY

Right of way acquisition and relocation assistance procedures will be in accordance with 23 CFR 710, 712, 713, and 720. Right of way functions shall be performed by local agencies prequalified by UDOT as to capability and knowledge of Federal procedures and regulations. If a hardship exists for the local agency, the Right-of-Way Division of UDOT may choose to perform these functions, with all costs paid by the local agency. Local agencies shall obtain approval from the Right-of-Way Division prior to the commencement of any acquisition activity. If the local agency decides to acquire rights of way and provide relocation assistance with local funding and use Federal funding for construction, all right of way activities shall be accomplished in compliance with the above procedures and regulations. This also pertains to donated rights of way. Failure to comply with the procedures and regulations will jeopardize Federal funding in any phase of the project. Prior to advertising for bids on all local government projects, the local agency will furnish the LGPE with a certification that all rights of way have been obtained.

#### 1.13 UTILITY ADJUSTMENTS

It is the policy of the UDOT not to reimburse utility companies for relocating their facilities. On Local Government projects, UDOT approval will be required for federal reimbursement of utilities. However, UDOT discourages use of federal funds to reimburse utilities, thus leaving more funds for road and bridge construction.

Utility adjustments, when requested for federal reimbursement, shall be in accordance with 23 CRF 645A and 645B and with UDOT's "Regulations for the Accommodation of Utilities and the Control and Protection of State Highway Rights of Way", and processed by the Utility Section of UDOT. Agreements with utility companies, when Federal reimbursement is not requested, shall be processed by the local agency. Utility facilities shall be adjusted or removed from the right of way where they constitute a hazard.

#### 1.14 CONSTRUCTION ENGINEERING

Construction Engineering may be accomplished by Local Engineers, Local Engineers of Record, or Consultants. A UDOT Project Manager will monitor each project. Local Engineers, Local Engineers of Record, and Consultants shall be pre-qualified by the Construction Division. UDOT engineering costs will be charged to the project. The local agency shall execute a Cooperative Agreement for Reimbursement and a Consultant Services Contract (if a consultant is used) with UDOT prior to any work being done.

UDOT may not perform construction engineering unless hardship conditions exist for the local agency and the engineering is approved by UDOT.

Project administration and control, including materials testing and quality assurance during the construction phase, will be in accordance with UDOT procedures and standards.